

Title (en)
ELECTRO ACOUSTIC SENSOR FOR HIGH PRESSURE ENVIRONMENTS

Title (de)
ELEKTROAKUSTISCHER SENSOR FÜR HOCHDRUCKUMGEBUNGEN

Title (fr)
CAPTEUR ELECTROACOUSTIQUE POUR DES ENVIRONNEMENTS SOUS HAUTE PRESSION

Publication
EP 2011167 A1 20090107 (EN)

Application
EP 06751277 A 20060420

Priority
US 2006015510 W 20060420

Abstract (en)
[origin: WO2007123537A1] A composite acoustic wave device (AWD) which is adapted for operation at high ambient pressures is provided. The AWD comprises two piezoelectric plates in back to back relationship, with electrodes disposed between the plates. The plates are bonded so as to neutralize the effects of external pressure. Further disclosed is a sensor utilizing the AWD and methods for utilizing such AWD for physical measurements in high pressure environments. An optional cavity formed between the piezoelectric plates offers the capability to measure the pressure and to further neutralize the residual effects of the pressure on measurement accuracy.

IPC 8 full level
H10N 30/80 (2023.01); **H10N 30/87** (2023.01); **B06B 1/06** (2006.01); **G01N 29/02** (2006.01); **G01N 29/22** (2006.01); **G01N 29/24** (2006.01); **H10N 30/40** (2023.01); **H10N 30/50** (2023.01); **H10N 30/88** (2023.01)

CPC (source: EP US)
G01L 9/0025 (2013.01 - EP US); **G01N 29/022** (2013.01 - EP US); **G01N 29/227** (2013.01 - EP US); **G01N 29/2437** (2013.01 - EP US); **H10N 30/302** (2023.02 - EP US); **G01N 2291/0256** (2013.01 - EP US); **G01N 2291/02809** (2013.01 - EP US); **G01N 2291/02818** (2013.01 - EP US); **G01N 2291/02872** (2013.01 - EP US); **G01N 2291/0426** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
WO 2007123537 A1 20071101; CH 701162 B1 20101215; CN 101208814 A 20080625; EP 2011167 A1 20090107; EP 2011167 A4 20120704; JP 2009534651 A 20090924; RU 2007135333 A 20090327; RU 2382441 C2 20100220; US 2009309453 A1 20091217; US 7825568 B2 20101102

DOCDB simple family (application)
US 2006015510 W 20060420; CH 3552008 A 20060420; CN 200680022690 A 20060420; EP 06751277 A 20060420; JP 2009506470 A 20060420; RU 2007135333 A 20060420; US 81407406 A 20060420